



Replacement Sheet

4000

4100

Siemens Safety Integrated Acceptance Test		Introduction					
List of Tests <input checked="" type="checkbox"/> Overview <input type="checkbox"/> Pulse Disable Path <input type="checkbox"/> External Stops <input type="checkbox"/> SPL Inputs/Outputs <input type="checkbox"/> Wiring Cross Check <input type="checkbox"/> Emergency Stop <input type="checkbox"/> Functional Relationships <input type="checkbox"/> (SBH) Safe Oper. Stop <input type="checkbox"/> (SG) Safe Speed <input type="checkbox"/> (SE) Safe Software Limit <input type="checkbox"/> Finished	Welcome to Siemens Safety Integrated Acceptance Test This wizard provides assistance for performing tests and preparing the Acceptance Test Report.						
	Machine designation:	4410	<input type="text"/>				
	Machine type:	4420	<input type="text"/>				
	Serial No.:	4430	<input type="text"/>				
	Manufacturer:	4440	<input type="text"/>				
	PLC version manufacturer:	4450	<input type="text"/>				
	Ultimate customer:	4460	<input type="text"/>				
	Name of tester:	4470	<input type="text"/>				
	Series machine startup	4480	<input type="checkbox"/>				
	Uses "Safe programmable logic."	<input checked="" type="checkbox"/> 4490					
4200		4300	4350	4500			
<input type="button" value="Previous Page"/>		<input type="button" value="Next Page >"/>		4700	4600	<input type="button" value="Exit"/>	<input type="button" value="Help"/>

Fig. 4

4200













List of Tests	
	 Overview
	 Pulse Disable Path
4210	✓ Test 1
	 External Stops
4220	✓ Operator Door
4230	✗ Tool Chain Door
	 Test 3
	 SPL Inputs/Outputs
	 Wiring Cross Check
	 Emergency Stop
	 Functional Relationships
	 (SBH) Safe Oper. Stop
	 (SG) Safe Speed
	 (SE) Safe Software Limit
4290	 Finished

Fig. 5

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Siemens Safety Integrated Acceptance Test		Summary	
List of Tests <input type="checkbox"/> Overview <input type="checkbox"/> Pulse Disable Path <input type="checkbox"/> External Stops <input type="checkbox"/> SPL Inputs/Outputs <input checked="" type="checkbox"/> Wiring Cross Check <input type="checkbox"/> Emergency Stop <input type="checkbox"/> Functional Relationships <input type="checkbox"/> (SBH) Safe Oper. Stop <input type="checkbox"/> (SG) Safe Speed <input type="checkbox"/> (SE) Safe Software Limit <input type="checkbox"/> Finished	Test of Wiring Cross Check This test verifies that appropriate alarms are generated when one channel of a SI signal is disconnected		
	Warning Protection of operating personnel must be given top priority when safety functions are configured and tested.		<input type="button" value="Begin This Test"/>
	Purpose This test verifies that wiring problem detection of a safety relevant signal is cross checked. If a wiring problem occurs, the appropriate alarm should be generated.		6370
	Procedure Press the "Begin This Test" button and then disconnect a channel of a safety relevant input signal. An example test involves disconnecting one input signal to the protective door/ light barrier. All alarms generated during the test appear in a list. Check the alarms that you wish to include in the report and uncheck the rest. A checkbox is provided for verifying that the appropriate alarms occurred. Repeat the test for all Safety Integrated		6360
<input type="checkbox"/> This test is not applicable to this machine			6350
<input type="button" value="Previous Page"/> <input type="button" value="Next Page"/>		<input type="button" value="Exit"/>	<input type="button" value="Help"/>

Fig. 6

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Siemens Safety Integrated Acceptance Test

List of Tests

- Overview
- Pulse Disable Path
- External Stops
- SPL Inputs/Outputs
- Wiring Cross Check
 - Test 1
- Emergency Stop
- Functional Relationships
- (SBH) Safe Oper. Stop
- (SG) Safe Speed
- (SE) Safe Software Limit
- Finished

Test of Wiring Cross Check
Please perform the set of steps listed below.

Running:
Test 1

1 Disconnect one channel (NCK/PLC/PROFIsafe) of a Cross-Checked input signal. For example disconnect protective door, light barrier or similar.

2 Check the alarms that you wish to appear in the report.

☒ Alarm 5011
☒ Alarm 5028
☒ Alarm 5034
☒ Alarm 5022

3 Reconnect the disconnected channel.

7350

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Exit Help

Fig. 7

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Siemens Safety Integrated Acceptance Test		Results: Test 1					
List of Tests <ul style="list-style-type: none">OverviewPulse Disable PathExternal StopsSPL Inputs/OutputsWiring Cross Check<ul style="list-style-type: none">Disconnected InputEmergency StopFunctional Relationships(SBH) Safe Oper. Stop(SG) Safe Speed(SE) Safe Software LimitFinished	Test of Wiring Cross Check <p>The test is complete. Please provide a description of the test and indicate success or failure.</p> <table border="1"><thead><tr><th>Test Trigger Condition:</th><th>Verify Alarms List</th><th>Repeat This Test</th></tr></thead><tbody><tr><td>Disconnected Input I32.7</td><td>Alarm 5011 Alarm 5028 Alarm 5034 Alarm 5022</td><td>Delete Test Results</td></tr></tbody></table> <p><input checked="" type="radio"/> Click here if the expected reaction occurred and the expected alarms appear.</p> <p><input type="radio"/> Click here if the expected reaction did NOT occur or the expected alarms did NOT appear.</p>	Test Trigger Condition:	Verify Alarms List	Repeat This Test	Disconnected Input I32.7	Alarm 5011 Alarm 5028 Alarm 5034 Alarm 5022	Delete Test Results
Test Trigger Condition:	Verify Alarms List	Repeat This Test					
Disconnected Input I32.7	Alarm 5011 Alarm 5028 Alarm 5034 Alarm 5022	Delete Test Results					
8350							
<div>< Previous Page Next Page ></div> <div>Exit Help</div>							

Fig. 8

9000

Siemens Safety Integrated Acceptance Test		<div style="display: inline-block; border: 1px solid black; padding: 2px;"> </div>																
List of Tests <div style="margin-top: 5px;"> Overview Pulse Disable Path External Stops SPL Inputs/Outputs Wiring Cross Check Emergency Stop Functional Relationships (SBH) Safe Oper. Stop <div style="margin-left: 20px;">✓ Axis X1 +</div> (SG) Safe Speed (SE) Safe Software Limit Finished </div>	<div style="border-bottom: 1px solid black; padding-bottom: 5px;"> Test of SBH (Safe Operational Stop) Reaction The test is complete. Please provide a description of the test and indicate success or failure. </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; border-bottom: 1px solid black;">Description</th> <th style="width: 50%; border-bottom: 1px solid black;">Data</th> </tr> </thead> <tbody> <tr> <td>Axis/Spindle Name</td> <td>Axis X1</td> </tr> <tr> <td>Direction</td> <td>Pos</td> </tr> <tr> <td>Speed exceeded</td> <td>71 mm/min</td> </tr> <tr> <td>Reaction Time</td> <td>0.5334 s</td> </tr> <tr> <td>Overtravel</td> <td>5.795 mm</td> </tr> </tbody> </table> <div style="border: 1px solid black; height: 30px; margin-top: 5px; position: relative;"> <div style="position: absolute; left: 5px; top: 5px;">◀</div> <div style="position: absolute; right: 5px; top: 5px;">▶</div> </div> </div> <div style="margin-top: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; border-bottom: 1px solid black;">Test Trigger Condition:</th> <th style="width: 50%; border-bottom: 1px solid black;">Test Alarms</th> </tr> <tr> <td style="border: 1px solid black; padding: 5px; vertical-align: top;"> Movement with adjusted traversing profile while SBH was active </td> <td style="border: 1px solid black; padding: 5px; vertical-align: top;"> Alarm 27011 Alarm 27022 Alarm 300908 Alarm 300914 </td> </tr> </table> </div> <div style="margin-top: 10px;"> <input checked="" type="radio"/> Click here if operational stop error was properly handled. <input type="radio"/> Click here if operational stop error was NOT properly handled. </div>	Description	Data	Axis/Spindle Name	Axis X1	Direction	Pos	Speed exceeded	71 mm/min	Reaction Time	0.5334 s	Overtravel	5.795 mm	Test Trigger Condition:	Test Alarms	Movement with adjusted traversing profile while SBH was active	Alarm 27011 Alarm 27022 Alarm 300908 Alarm 300914	<div style="margin-bottom: 20px;"> Results: Axis X1 + </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 20px; text-align: center;"> Repeat This Test for Another Axis </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Delete Test Results </div> <div style="margin-top: 20px;"> </div> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-top: 10px;"> View Results Graphs </div>
Description	Data																	
Axis/Spindle Name	Axis X1																	
Direction	Pos																	
Speed exceeded	71 mm/min																	
Reaction Time	0.5334 s																	
Overtravel	5.795 mm																	
Test Trigger Condition:	Test Alarms																	
Movement with adjusted traversing profile while SBH was active	Alarm 27011 Alarm 27022 Alarm 300908 Alarm 300914																	

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Exit

Help

Fig. 9

Replacement Sheet

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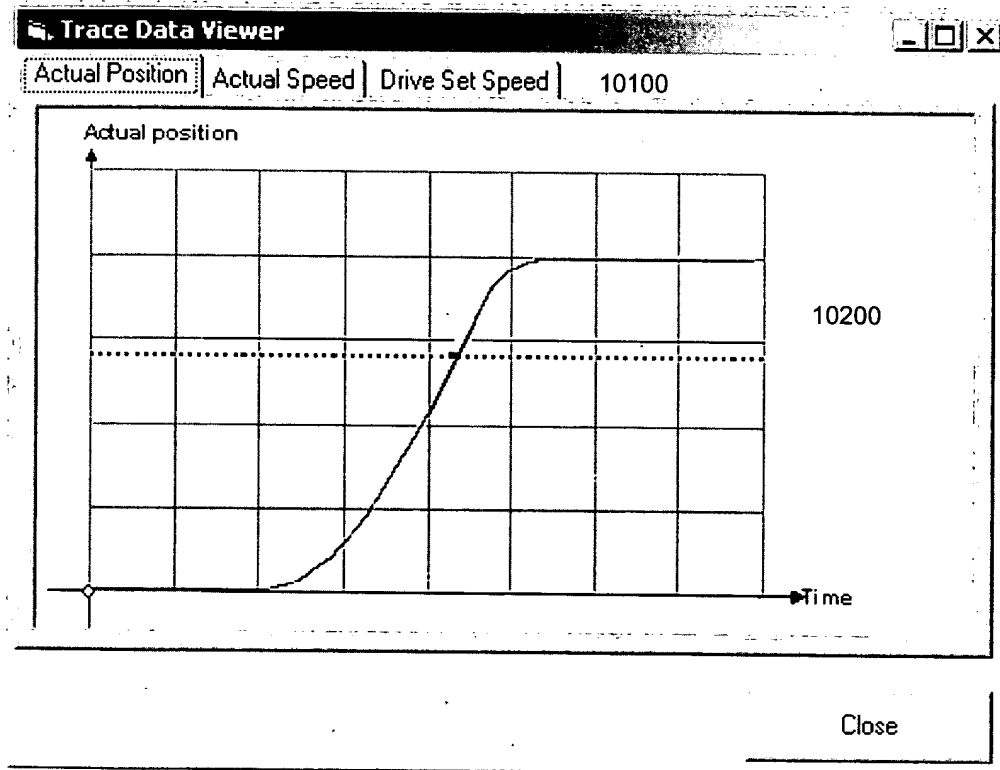


Fig. 10